Table 1 | Rates, log rates, and estimated RRs using the approaches advocated by Zhang *et al.*,[2] denoted by RR_Z and Liu and Foley,[1] denoted by RR_L

Day	Mortality rate (hypothetical)	Log (rate)	Log RR_Z	Log RR_L
1_D	**10**	2.30	**1.97**[a]	**2.30**[b]
2	0.8	−0.22	−0.55	−0.64
3_D	0.8	−0.22	−0.55	−0.64
4	0.8	−0.22	−0.55	−0.64
5_D	**3.05**	1.12	**0.79**	**0.92**
6	0.8	−0.22	−0.55	−0.64
7	0.8	−0.22	−0.55	−0.64
Total	17.05	2.32		
Average	2.44	0.33		

Abbreviations: D, dialysis; RR, relative risk.
[a]Log RR_Z = log(rate) − avg[log(rate)] = 2.30 − (2.30-0.22 … −0.22)/7 = 1.97; i.e., RR_Z = 7.2.
[b]Log RR_L = log(rate) − avg*[log(rate)] = 2.30 − (−0.22-0.22 … −0.22)/6 = 2.30; i.e., RR_L = 10. *Indicates that the average excludes the day of interest.
Bold entries are hypothetical, as opposed to empirical, thus precluding statements regarding statistical significance.

interest, they present a hypothetical example in which the death rates for days 1–7 are 10, 1, 1, 1, 1, 1, and 1, respectively, and note that the comparison of day 1 with the average of days 2–7 should yield a relative risk (RR) of 10. Our method would compare the log rate for day 1 with the average of the log rates for days 1–7 to obtain an RR = 7.2 (not 4.4 as LF have stated), which, they claim, understates the true RR. In fact, the log RR in our analysis is 6/7 times theirs, and hence these two approaches yield the same test statistic and *P*-value.

A weakness in the approach suggested by LF[1] is exemplified in Table 1, in which mortality (hypothetical rates) is elevated on day 1 and day 5, and RRs are computed under LF (RR_L) and our (RR_Z) approaches. As we claim in the preceding paragraph, log $RR_Z = 6/7 \times \log RR_L$ for each day. When day 1 is compared with day 5, we find RR = 10/3.05 = 3.28, directly from the rates. It is noteworthy that $RR_Z = \exp(1.97–0.79) = 3.25$ gives the same result except for round-off, whereas $RR_L = \exp(2.30–0.92) = 3.97$ gives a sizeable overestimate. The lack of self-consistency in the LF[1] approach stems from the reference being different for each RR, an issue avoided in our approach.

1. Liu J, Foley RN. Alternate-day dialysis may be needed for hemodialysis. *Kidney Int* 2012; **81**: 1055–1057.
2. Zhang H, Schaubel DE, Kalbfleisch JD *et al.* Dialysis outcomes and analysis of practice patterns suggests the dialysis schedule affects day-of-week mortality. *Kidney Int* 2012; **81**: 1108–1115.

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Kidney International (2012) **82,** 1339–1340; doi:10.1038/ki.2012.342

The Authors Reply: We thank Dr Zhang *et al.*[1] for their correspondence and once again express our sincere gratitude to them for replicating the main findings of our previous study.[2] It was never our intent to impart the impression that one way of compressing multiple parameter estimates is intrinsically better than another. We do not believe this, but we do believe that the method used for compressing data depends on the question being asked. For example, in a notional array of *n* data points, where X_1 is the main item of interest, the question 'How does X_1 compare with the average of X_2 to X_n?' appears to us to be perfectly reasonable, as is the intrinsically different question 'How does X_1 compare with the average of all the observations, from X_1 to X_n?' The point we were trying to make with our extreme example, and demonstrated equally well with the equally extreme counterexample from Zhang *et al.*,[1] is that an approach of presenting compressed data alone, without presenting the individual data points, runs the risk of making the existence of extremely aberrant observations difficult to unearth. Presenting data with both approaches (uncompressed and compressed)[2] negates this risk.

1. Zhang H, Schaubel DE, Kalbfleisch JD *et al.* Choice of reference in the evaluation of the day-of-week effect on mortality on hemodialysis. *Kidney Int* 2012; **82**: 1339–1340.
2. Foley RN, Gilbertson DT, Murray T *et al.* Long interdialytic and mortality among patients receiving hemodialysis. *N Engl J Med* 2011; **365**: 1099–1107.

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Kidney International (2012) **82,** 1340; doi:10.1038/ki.2012.343

Renal replacement in older adults: one size does not fit all!

To the Editor: Kurella *et al.*[1] elegantly noted three very important factors to consider at the time of discussion of renal replacement therapy in geriatric patients: life expectancy, competing treatment strategies, and patients' preferences. We would like to comment on a few factors that impact outcomes. Knowledge of the patient's functional and cognitive status is imperative. Poor functional status and activity of daily living dependence, for example, transfer disability as described by Couchoud *et al.*,[2] resulting in diminished survival. In the geriatric literature, performance trajectories assessed by gait speed, stride length, and grip strength independently predict death and mortality.[3] Older patients with chronic kidney disease have significant cognitive impairment, which put